

Remarks

Claims 1-16 were pending.

Claims 13-15 are withdrawn.

Claims 2-5 are canceled.

Claims 1, 6-9, 11 and 13 are amended.

Claims 1 and 6-16 are now pending.

Claims 1, 6-12 and 16 are presented for reconsideration.

Claim 1 is amended to incorporate the limitations of claims 2 and 3. The light is now defined as sunlight and the degradation rate of the dyestuffs is defined.

Claim 1 is also amended to define the photocatalyst as a phthalocyanine as described on page 9, lines 12-21 of the disclosure.

Claims 6 and 7 are amended to require the presence of the azo dyestuffs.

Claim 8 is amended to require the presence of the triphenylmethane dyestuff.

Claim 9 is amended to replace "FWA" with "fluorescent whitening agent". Support is found on page 39, line 5 and page 40, line 5.

Claim 11 is amended to depend on claim 10 and to state that the phthalocyanine compound is a phthalocyanine photocatalyst. Support is found in original claim 4.

Claim 13 is amended to state that the phthalocyanine compound is a phthalocyanine photocatalyst. Support is found in original claim 4.

No new matter is added.

Claim Rejections

Claims 9 and 11 are rejected under 35 USC 112, second paragraph, for reasons of record.

The Examiner objects that the term "FWA" is not defined.

Claim 9 is corrected by amendment. It is clear from the specification that "FWA" is used interchangeably with "fluorescent whitening agent". See page 39, lines 5-6 and page 40, line 5.

In view of this, Applicant submits that these 35 USC 112, second paragraph, rejections are addressed and are overcome.

Claims 1-12 and 16 are provisionally rejected on the ground of nonstatutory obviousness type double patenting as being unpatentable over claims 1, 10-19, 21 and 22 of copending app. No. 11/661,174 in view of Willey, U.S. Pat. No. 5,916,481.

Applicant will file the appropriate terminal disclaimer(s) upon resolution of all other matters.

Claims 1-6 and 10 are rejected under 35 USC 103(a) as being unpatentable over Bonelli, et al., U.S. 2003/0087791 in view of Kaser, U.S. Pat. No. 5,211,719 and Campbell, U.S. Pat. No. 5,853,929.

Bonelli is cited as disclosing a colored granular composition comprising photobleach. The photobleaches are for instance phthalocyanine sulfonates, para. [0021]. Other ingredients include for example dyes, para. [0074].

Kaser is cited as disclosing aqueous solutions of azo dyes.

Campbell is cited as disclosing a phthalocyanine dye with a relative hue angle of 220-230°.

Claim 7 is rejected under 35 USC 103(a) as being unpatentable over Bonelli in view of Kaser and Campbell and further in view of Abel, et al., U.S. Pat. No. 4,405,329.

Abel is cited as disclosing concentrated fluid formulations of textile dyes where the dye may be of formula (103) of col. 13.

Claim 8 is rejected under 35 USC 103(a) as being unpatentable over Bonelli in view of Kaser and Campbell and further in view of Matsumoto, JP 62025171.

Matsumoto is cited as disclosing dye compounds for relief patterns for microcolor filters containing triphenylmethane dyes and phthalocyanine dyes.

Claims 9, 11, 12 and 16 are rejected under 35 USC 103(a) as being unpatentable over Bonelli in view of Kaser and Campbell and further in view of Willey, Pat. No. 5,916,481.

Willey is cited as disclosing laundry or cleaning compositions comprising TINOPAL CBS-X. Willey is also cited as disclosing liquid formulations and as disclosing the use for treating textiles.

Applicant respectfully rebuts these rejections.

The Examiner states that it would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the colored granular composition of Bonelli with the disazo dyes of Kaser in view of a relative hue angle as taught by Campbell with a reasonable expectation that this would result in improved properties such as whitening effect.

Applicant respectfully disagrees.

The problem underlying the present invention is to avoid the accumulation of dyestuffs which are for example present in detergents or softeners and lead to an increasing coloration of a fabric after several wash cycles. Dyes are frequently used to improve a bleaching and whitening effect. However, dyestuffs accumulate with every use and after a few uses the fabrics become colored. See page 1, lines 7-23.

This problem has been solved by providing a composition comprising at least one photocatalyst and at least one azo dyestuff and/or at least one triphenylmethane dyestuff, which produces in the CIElab colour coordinate system a relative hue angle of 220 – 320° and wherein the dyestuff component is degraded when the composition is exposed to sunlight. This composition contributes only to an increased whitening appearance also when applied several times. Such a composition may be part of a detergent composition or of a fabric softener composition.

The present Examples impressively demonstrate the increased degradation rate of the dyestuffs, when the phthalocyanine compound is present. The results are summarized in Table 1 of pages 74-75 of the disclosure. Table 1 is reproduced below.

Table 1

	Photo-catalyst	Concentration Photocatalyst [$\mu\text{mol/l}$]	Dyestuff	Concentration Dyestuff [$\mu\text{mol/l}$]	Degradation of the Photocatalyst after 2 hours	Degradation of the Dyestuff after 2 hours
1	1	3.6			11.69%	
2	1	3.6	B	1.44	10.75%	4.65%
3	1	3.6	B	3.25	9.74%	5.36%
4	1	3.6	B	5.57	10.01%	4.58%
5	1	3.6	B	6.49	11.01%	5.50%
6	1	3.6	B	30.30	8.61%	3.63%
7	1	18	B	7.21	6.43%	6.72%
8	----	----	B	4.33	---	0.20%
9	2	3			17.19%	
10	2	3	B	4.33	15.71%	5.72%
11	2	3	A	4.41	9.51%	20.50%
12	----	---	A	4.41	---	0.20%
13	1	3.6	A	2.94	7.42%	17.18%
14	1	3.6	A	6.62	5.38%	16.13%
15	1	3.6	A	11.35	4.62%	15.02%
16	1	3.6	A	13.24	4.57%	15.47%
17	1	18	A	14.71	5.66%	20.51%

Whereas the dyes degrade only to an extent of 0.20% after 2 h exposure without the phthalocyanine compound, the degradation is increased up to approximately 4 to 20% in the presence of the phthalocyanine. This corresponds to a **20 to 100 fold relative increase of degradation**.

This result is surprising. A skilled person gets no motivation from the prior art to expect such an increased degradation rate of the dyestuff. There is totally lacking the required expectation of success.

Bonelli does not at all disclose that a dye may be degraded in the presence of a phthalocyanine photo bleach. On the contrary, his intention is to prepare colored speckles, page 1, para. [0016]-[0017].

Kaser discloses concentrated aqueous solutions of anionic disazo dyes with polyglycol amines. Kaser does not provide any disclosure that dyes may be degraded in the presence of phthalocyanine compounds.

Campbell discloses a trichromatic set of colored toners comprising a blue phthalocyanine compound. The technical field of trichromatic toners for use in electroreprography is totally different from that of shading dyes in detergents. Campbell is non-analogous art. Further, this document teaches away from the present invention since when mixing dyes within a trichromic set of dyes it is highly desirable that all dyes have an equally good light stability.

Applicants submit that the combination of the above references does not provide any motivation to prepare the present composition with any expectation of success. The present degradation of azo and triphenylmethane dyes in the presence of a phthalocyanine and sunlight could not have been expected.

In view of this discussion and the results of the working Examples, Applicant submits that these 35 USC 103(a) rejections are addressed and are overcome.

In view of all of the above, Applicant submits that each of the claim rejections under 35 USC 112, second paragraph and 35 USC 103(a) are addressed and are overcome.

The Examiner is kindly requested to reconsider and to withdraw these rejections.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'T. Stevenson', with a long horizontal flourish extending to the right.

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